T0027O"62E0F660

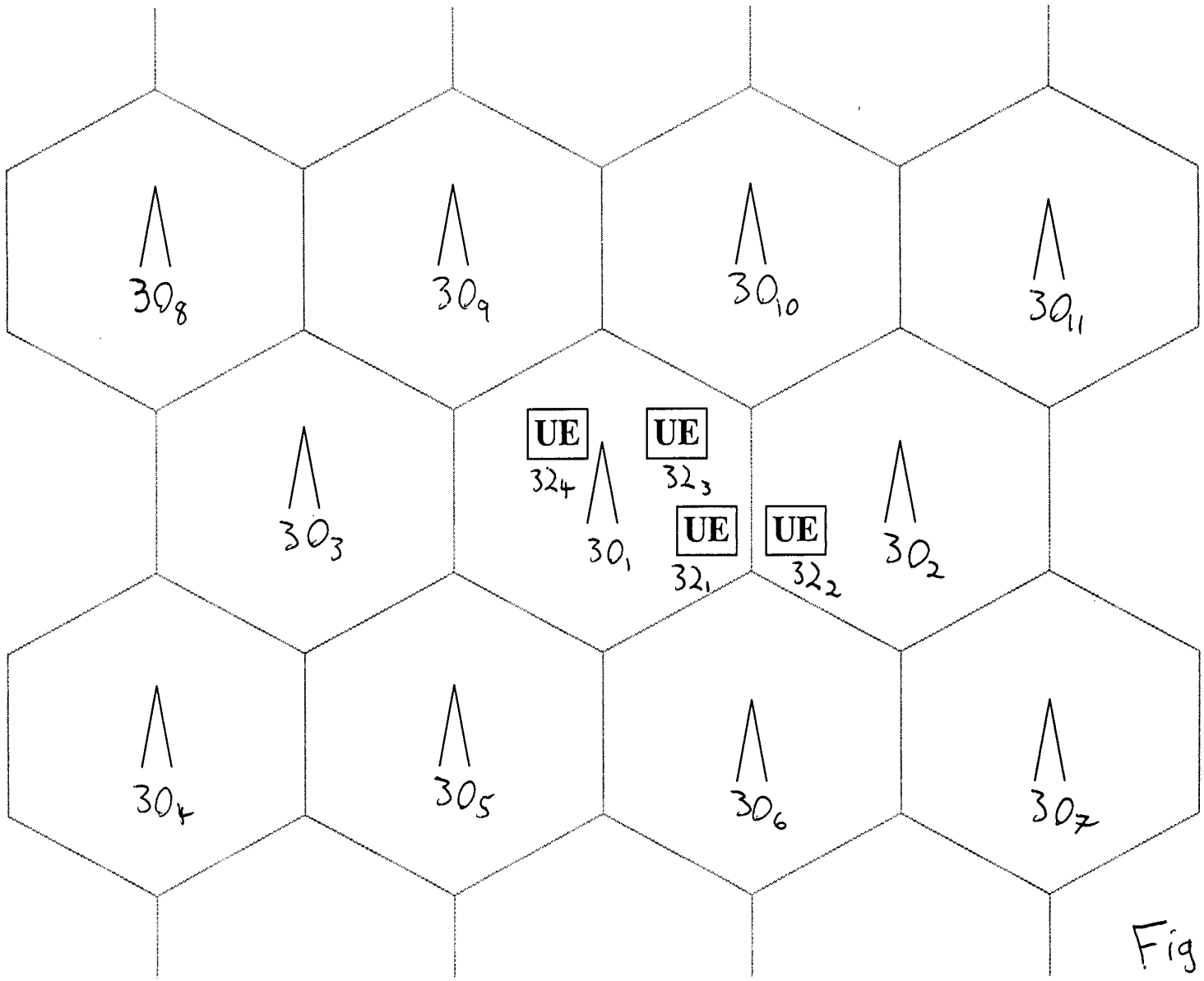

Fig. 1

JC879 U.S. PTO
09/910329
07/20/01

T0024 62E0T660

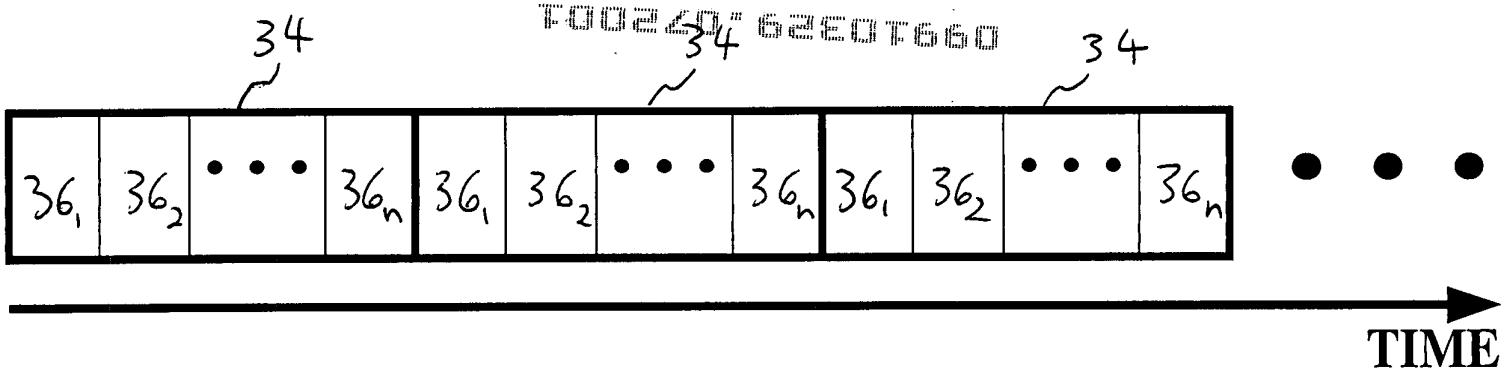

Fig. 2

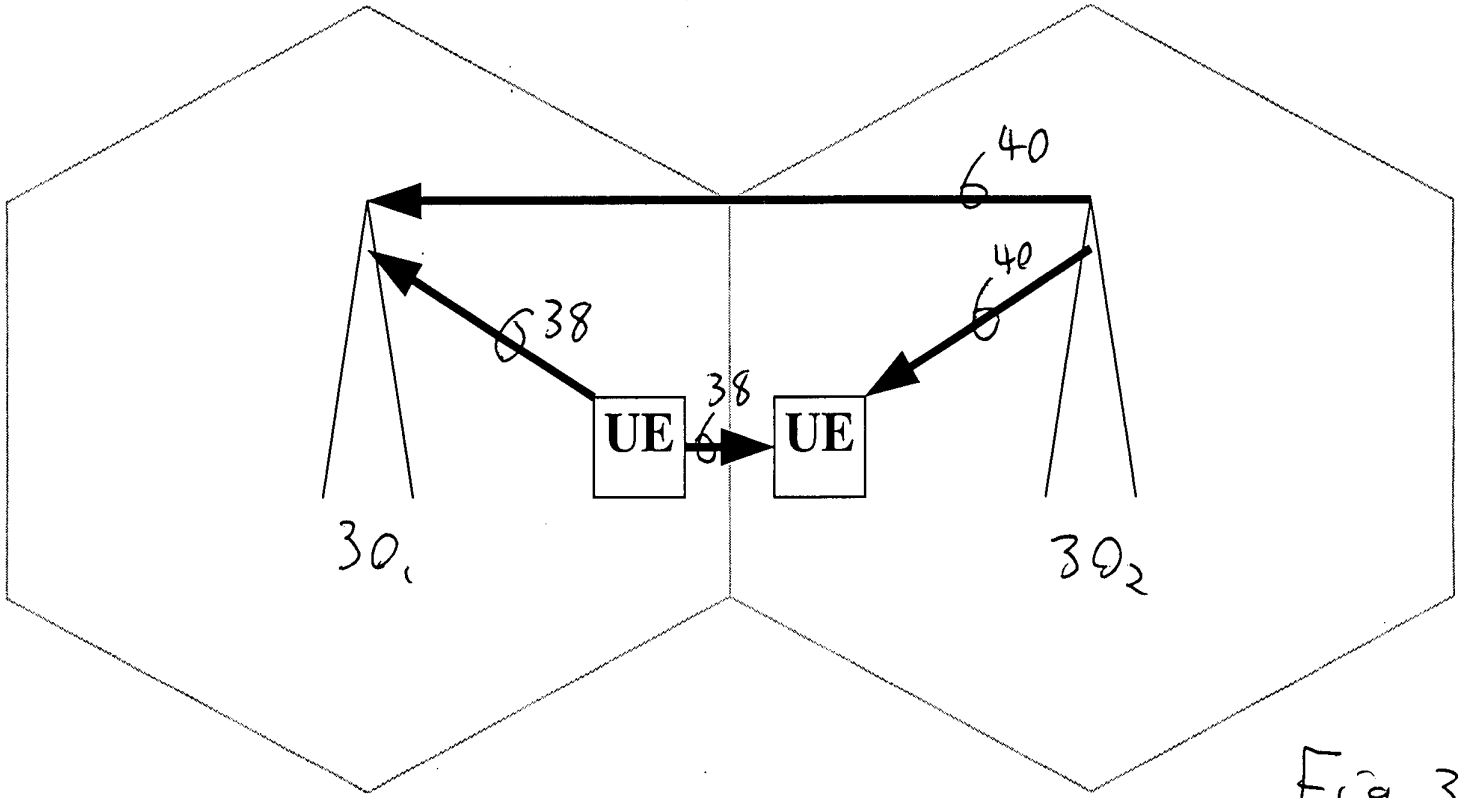

Fig. 3

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76

AVAILABILITY LIST				
CELL	TIME SLOT AVAILABILITY			
(UPLINK/DOWNLINK)	S1	S2	...	SN
1 (UPLINK)	X	X	...	
1 (DOWNLINK)		X	...	X
2 (UPLINK)	X	X	...	
2 (DOWNLINK)			...	X
	. . .			
N (UPLINK)	X	X	...	
N (DOWNLINK)		X	...	X

Fig. 4

[0027] 62607660

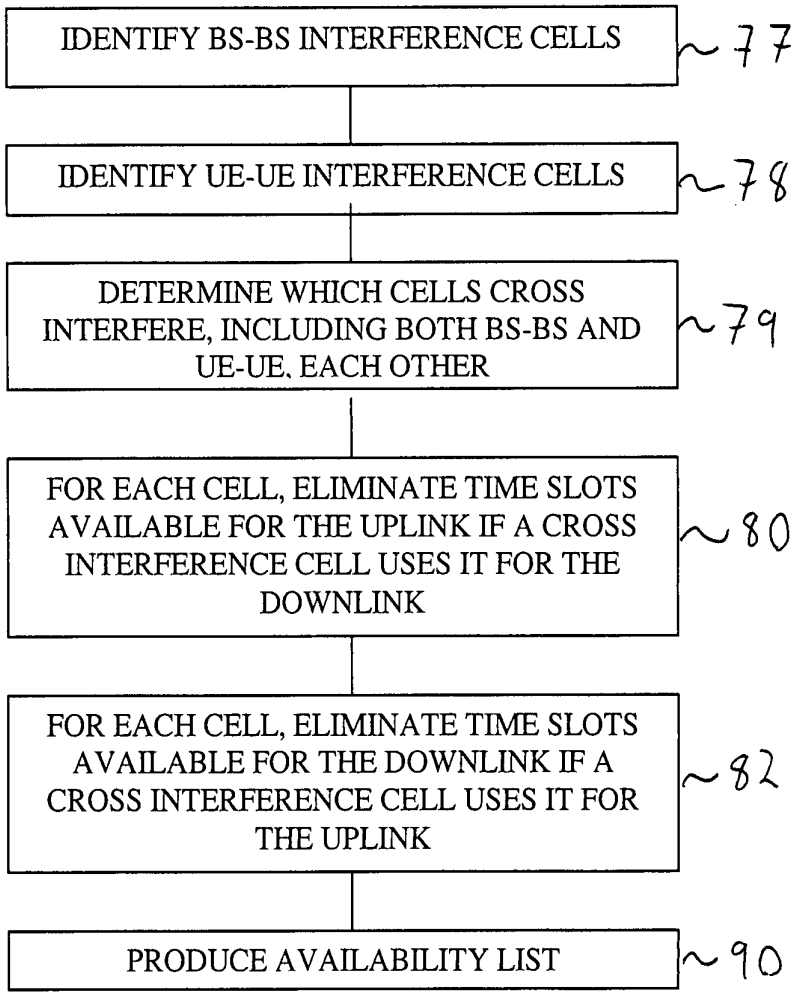

Fig. 5

84

CROSS INTERFERENCE CELL LIST											
	POTENTIAL CROSS INTERFERRING CELLS										
CELL	1	2	3	4	5	6	7	8	9	10	11
1	X	I	I		I	I*			I	I	
2	I	X				I	I			I	I
3	I		X	I	I*			I	I		
4			I	X	I						
5	I		I*	I	X	I					
6	I*	I			I	X	I				
7		I				I	X				
8			I					X	I		
9	I		I					I	X	I	
10	I	I							I	X	I
11		I								I	X

Fig. 6

86

TIME SLOT ALLOCATION PER CELL															
	TIME SLOT ALLOCATION														
CELL	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
1			D	U											
2	D	D							U						
3				U	D										
4										D	D				
5			D											U	
6						D									U
7										D					
8										D	D				
9			-			D	U								
10			D	U											
11										D	D	D	D		U

Fig. 7

88

AVAILABILITY LIST FOR CELL 1															
CELL	TIME SLOT AVAILABILITY														
(UPLINK/DOWNLINK)	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
1 (UPLINK)	X	X	X		X	X									
1 (DOWNLINK)				X			X		X					X	X

Fig. 8

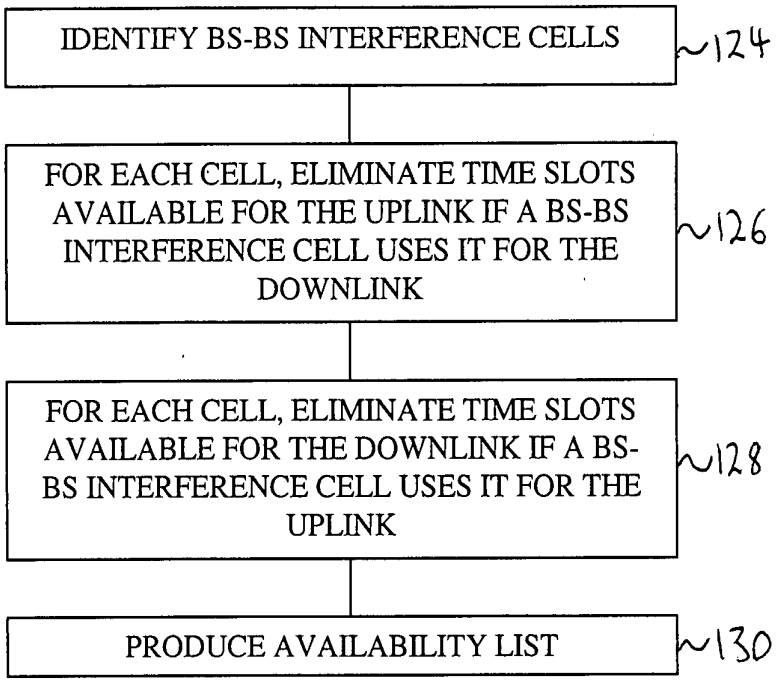
IDENTIFY BS-BS INTERFERENCE CELLS
124
FOR EACH CELL, ELIMINATE TIME SLOTS AVAILABLE FOR THE UPLINK IF A BS-BS INTERFERENCE CELL USES IT FOR THE DOWNLINK
126
FOR EACH CELL, ELIMINATE TIME SLOTS AVAILABLE FOR THE DOWNLINK IF A BS-BS INTERFERENCE CELL USES IT FOR THE UPLINK
128
PRODUCE AVAILABILITY LIST
130

Fig. 9

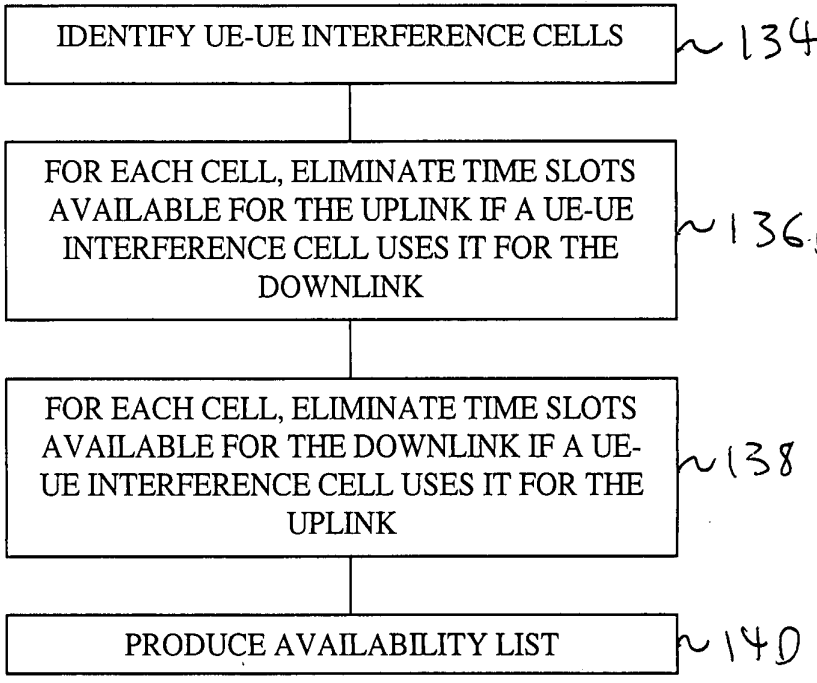
IDENTIFY UE-UE INTERFERENCE CELLS
134
FOR EACH CELL, ELIMINATE TIME SLOTS AVAILABLE FOR THE UPLINK IF A UE-UE INTERFERENCE CELL USES IT FOR THE DOWNLINK
136
FOR EACH CELL, ELIMINATE TIME SLOTS AVAILABLE FOR THE DOWNLINK IF A UE-UE INTERFERENCE CELL USES IT FOR THE UPLINK
138
PRODUCE AVAILABILITY LIST
140

Fig. 11

~132

BS-BS CROSS INTERFERENCE CELL LIST											
	POTENTIAL CROSS INTERFERRING CELLS										
CELL	1	2	3	4	5	6	7	8	9	10	11
1	X	I	I		I				I	I	
2	I	X				I	I			I	I
3	I		X	I				I	I		
4			I	X	I						
5	I			I	X	I					
6		I			I	X	I				
7		I				I	X				
8			I					X	I		
9	I		I					I	X	I	
10	I	I							I	X	I
11		I								I	X

Fig. 10

~142

UE-UE CROSS INTERFERENCE CELL LIST											
	POTENTIAL CROSS INTERFERRING CELLS										
CELL	1	2	3	4	5	6	7	8	9	10	11
1	X	I*	I*		I*	I*			I*	I*	
2	I*	X				I*	I*			I*	I*
3	I*		X	I*	I*			I*	I*		
4			I*	X	I*						
5	I*		I*	I*	X	I*					
6	I*	I*			I*	X	I*				
7		I*				I*	X				
8			I*					X	I*		
9	I*		I*					I*	X	I*	
10	I*	I*							I*	X	I*
11		I*								I*	X

Fig. 12

EP 2 207 380 A1

T0020" 62E0T660

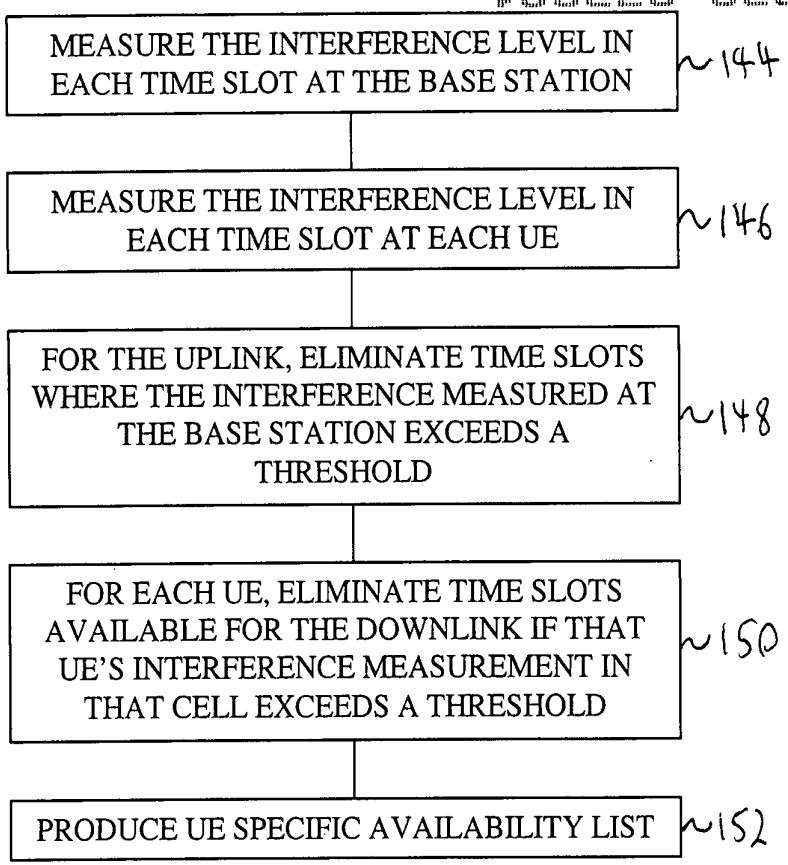

Fig. 13

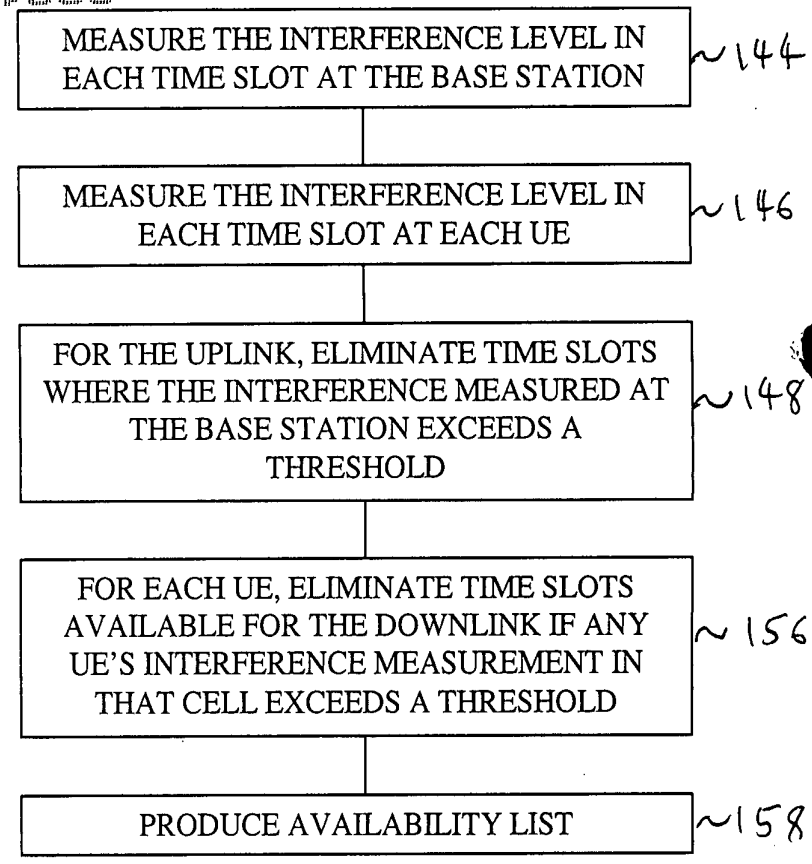

Fig. 14

154

AVAILABILITY LIST FOR CELL N															
UE IN CELL N (UPLINK/DOWNLINK)	TIME SLOT AVAILABILITY														
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
CELL (UPLINK)	X	X					X								
UE 1 (DOWNLINK)			X						X					X	X
UE 2 (DOWNLINK)									X						X
...															
UE N (DOWNLINK)						X	X	X	X						X

Fig. 15

T0024"62E0T660

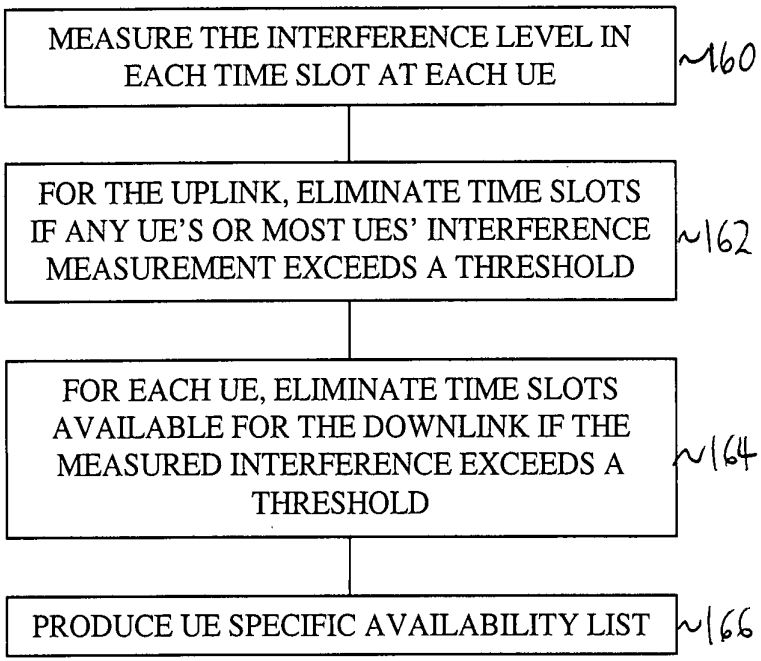

Fig. 16

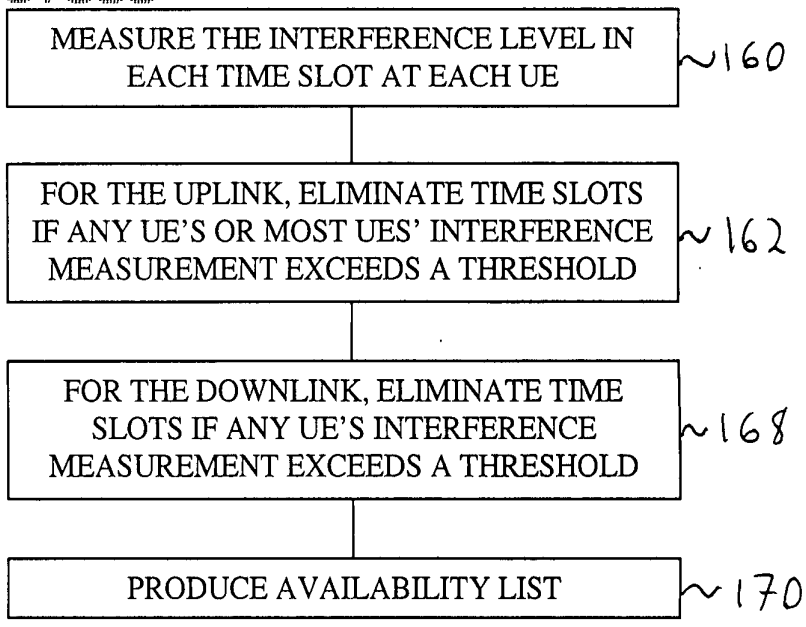

Fig. 17

[0024] 62E0F660

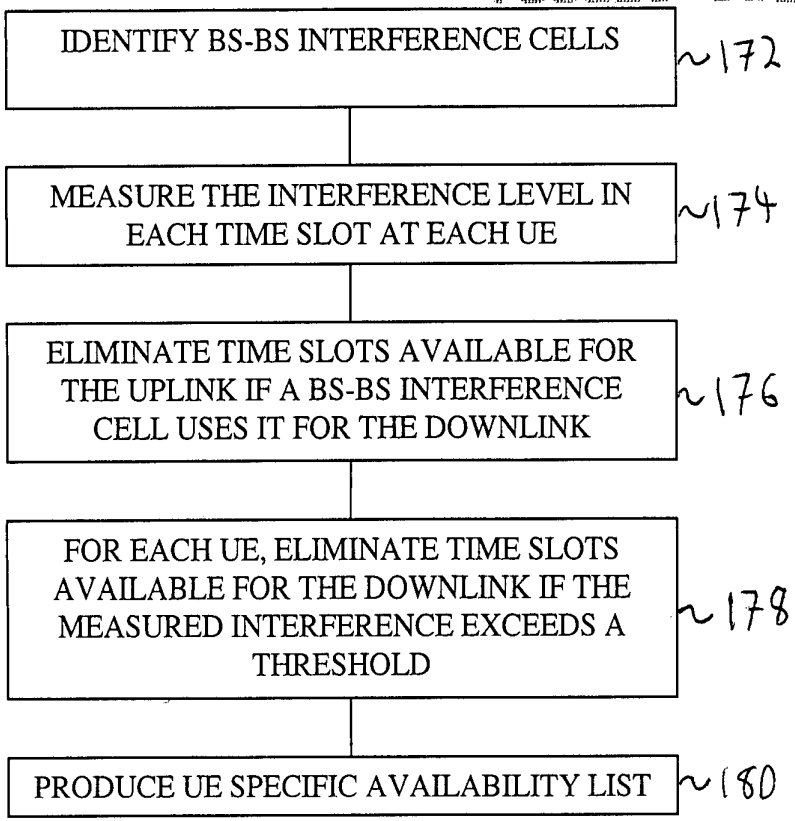

Fig. 18

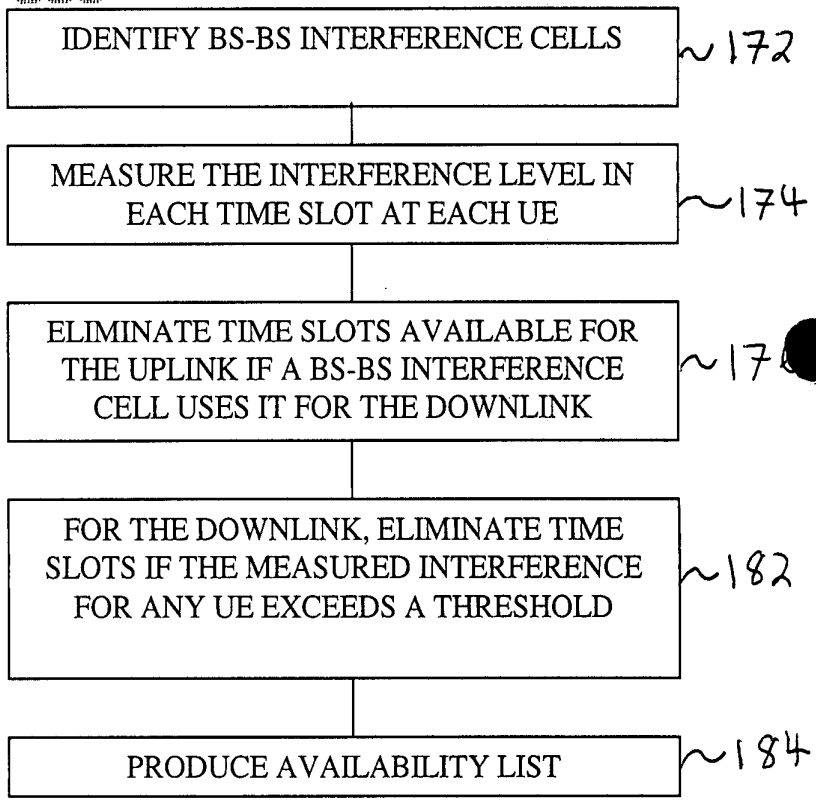

Fig. 19

T0027D" 62E0T660

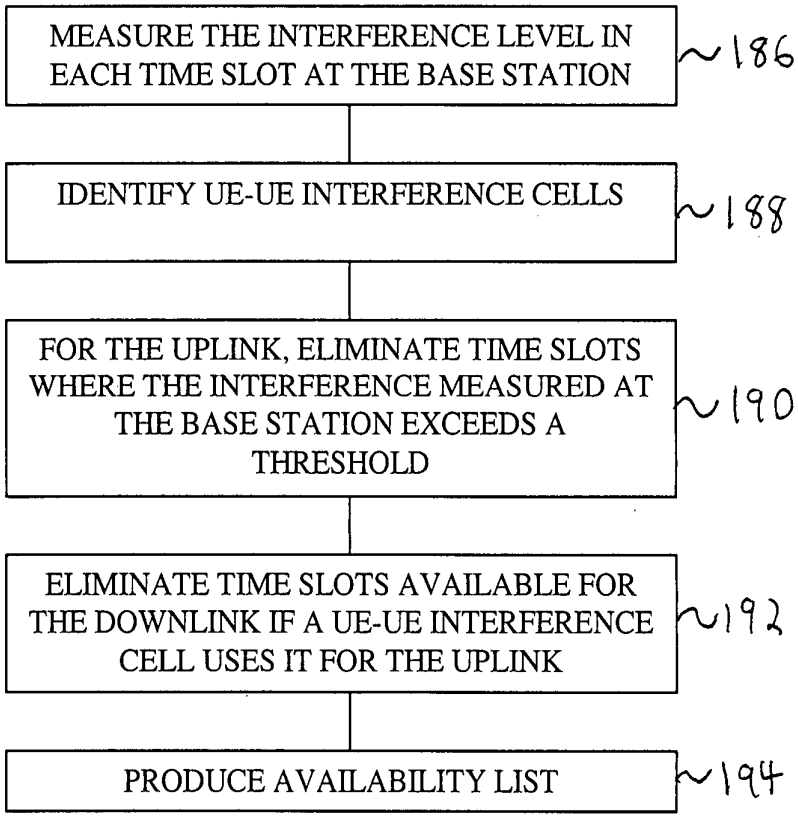

Fig. 20

T0020 62E0T660

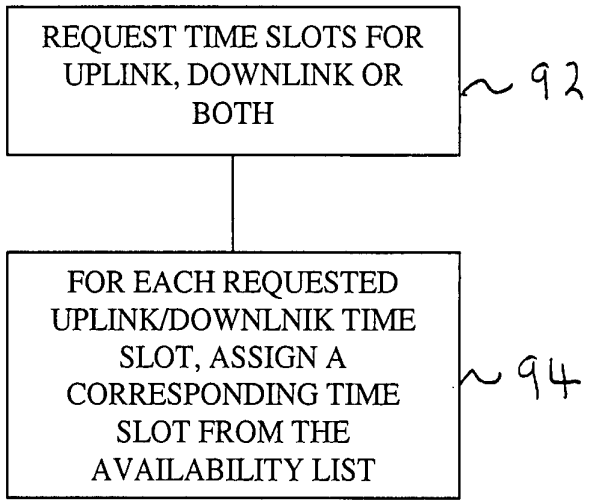

Fig. 21

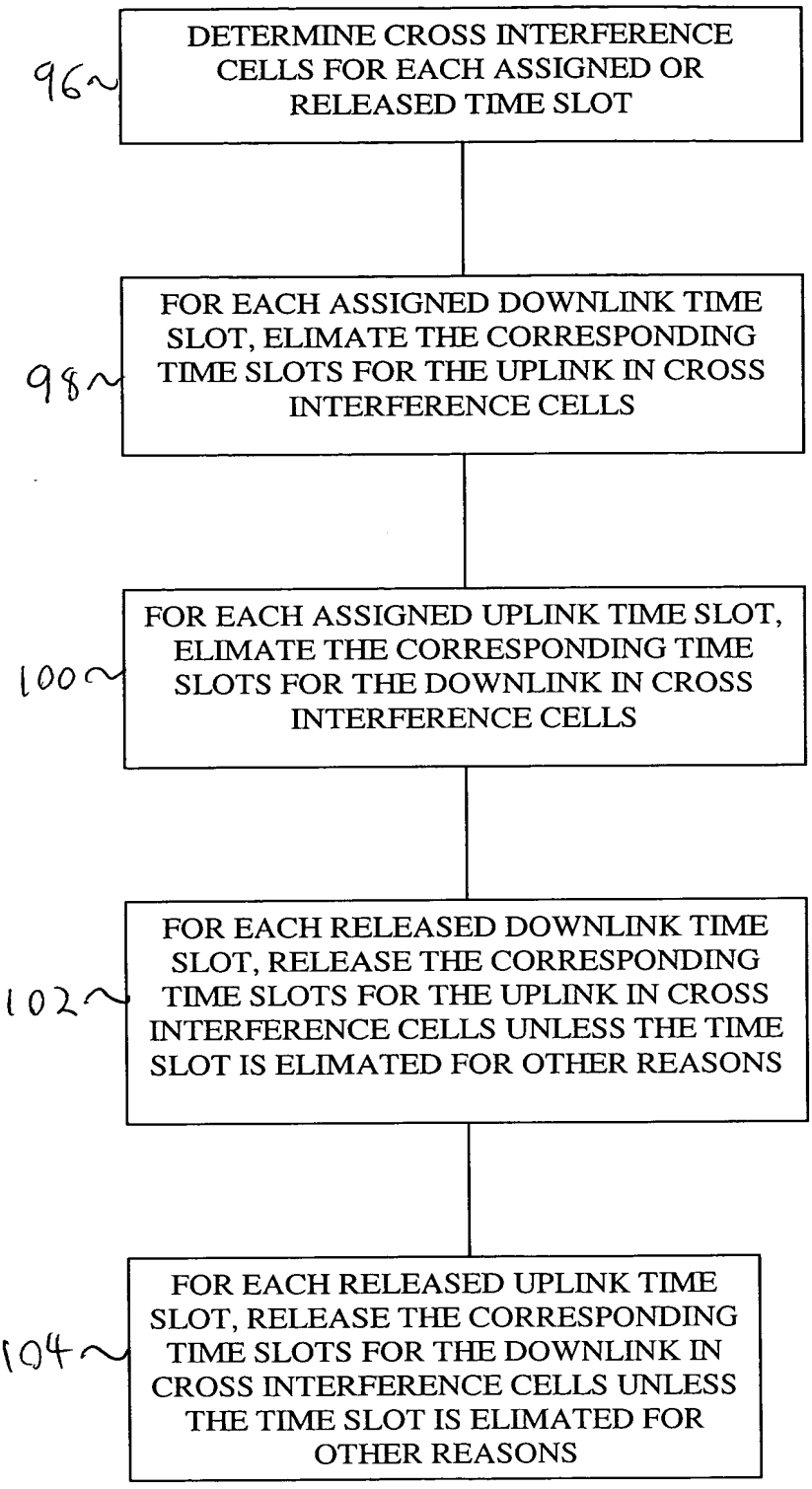

Fig. 22

T-002-0-626-T-650

~106

TIME SLOT ALLOCATION PER CELL															
	TIME SLOT ALLOCATION														
CELL	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
1			D	U											
2	D	D							U						
3				U	D										
4										D	D				
5			D											U	
6						D**	D*	U*							U
7										D					
8										D	D				
9						D	U								
10			D	U											
11										D	D	D	D		U

Fig. 23

~108

AVAILABILITY LIST FOR CELL 7															
CELL	TIME SLOT AVAILABILITY														
(UPLINK/DOWNLINK)	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
7 (UPLINK)	X	X				R	X*								
7 (DOWNLINK)								X*	X						X

Fig. 24

T00270" 62607660

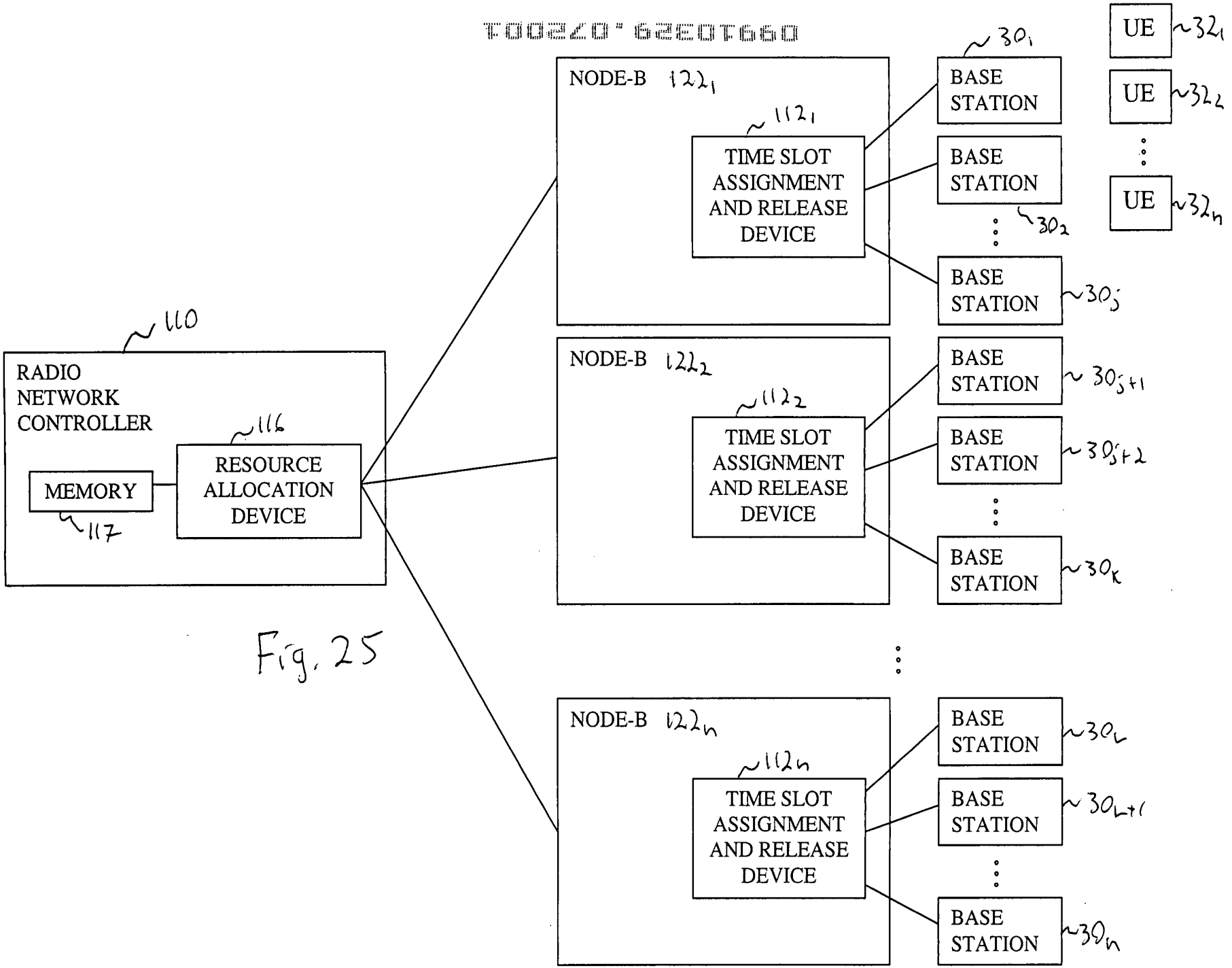

Fig. 25

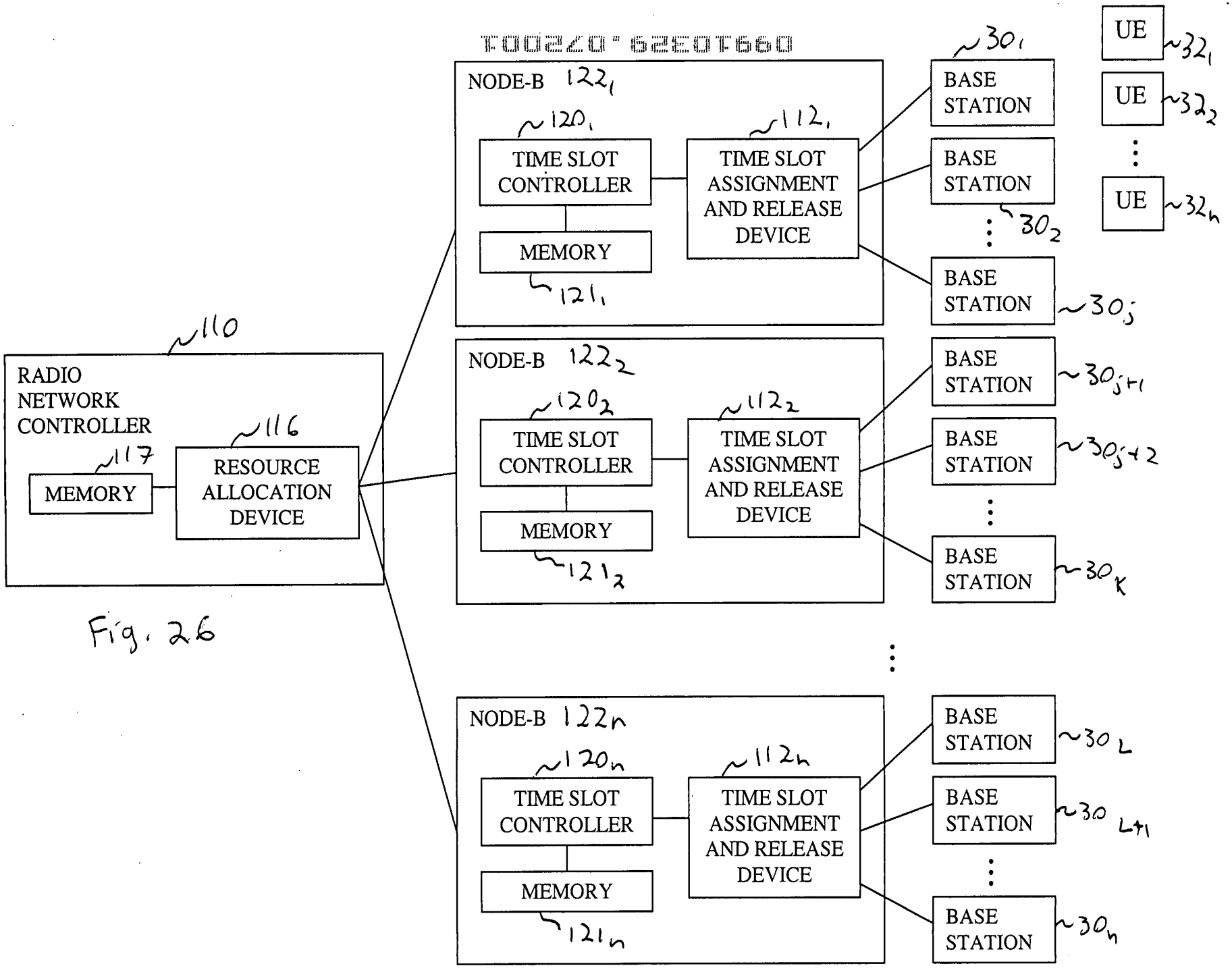
RADIO NETWORK CONTROLLER
110
MEMORY
117
RESOURCE ALLOCATION DEVICE
116
NODE-B 122₁
120₁
TIME SLOT CONTROLLER
MEMORY
121₁
112₁
TIME SLOT ASSIGNMENT AND RELEASE DEVICE
NODE-B 122₂
120₂
TIME SLOT CONTROLLER
MEMORY
121₂
112₂
TIME SLOT ASSIGNMENT AND RELEASE DEVICE
NODE-B 122n
120n
TIME SLOT CONTROLLER
MEMORY
121n
112n
TIME SLOT ASSIGNMENT AND RELEASE DEVICE
BASE STATION
30₁
30₂
30j
30j+1
30j+2
30K
30L
30L+1
30h
UE
32₁
32₂
32h

Fig. 26